

REMARKS/ARGUMENTS

Reconsideration of the present application is respectfully requested. After this amendment, claims 1, 6, 21, 41, 44 and 45 are pending.

Claims 1, 21, 44 and 45 have been amended. Support for the amendments is found on page 31, lines 1-3 of the specification. No New matter has been added by way of the amendments.

The Applicant appreciates the indication of allowance of claim 6, directed to an isolated promoter comprising SEQ ID NO: 1.

Rejections Under 35 USC §112, First Paragraph

Written Description

Claims 1, 21, and 44-45 remain rejected under 35 USC §112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

The Office Action states: "The Office requires that Applicants demonstrate that they are in possession of the claimed subject matter. In the instant application, Applicants' broadest claims are drawn to any promoter fragment of SEQ ID NO: 1.... Moreover, Applicants fail to draw the nexus between structure and function that defines their claimed genus of promoter fragments. Applicants are claiming a promoter fragment comprising any number of nucleotides of SEQ ID NO:1, but Applicants have not presented by way of disclosure or example, a single promoter fragment of SEQ ID NO:1, whose promoter activity is the same as the promoter activity of the nucleotide sequence of SEQ ID NO:1.

Claims 1, 21, 44 and 45 have been amended. Support for the amendments is found in the specification on page 31, lines 1-3.

The rejection is respectfully traversed, in that the inventors have described the structure of the polynucleotide, the function associated with the structure such

that it meets the test that one skilled can appreciate that the application “*reasonably* conveys to the artisan that the inventor had possession at the time of the later claimed subject matter.” (MPEP 2163.02). The Federal Circuit has noted that, “the written description requirement would be met for all of the claims [of the patent at issue] if the functional characteristic of [the claimed invention was] coupled with a disclosed correlation between that function and a structure that is sufficiently known or disclosed. *Enzo Biochem v. Gen-Probe, Inc.*, 323 F3d 956, 964 (Fed. Cir. 2002). This is also reflected in the statement in the Federal Register, Vol. 66, No. 4, p. 1106 (January 5, 2001) that, “For each claim drawn to a genus: the written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species by actual reduction to practice...reduction to drawings...*or by disclosure of relevant, identifying characteristics, i.e., structure of other physical and/or chemical properties, by functional characteristic coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics sufficient to show the applicant was in possession of the claimed genus.*”

In the specification, structure is shown by disclosure of the representative sequence, SEQ ID NO: 1, the isolated promoter that is capable of driving transcription in a seed-preferred manner, natively associated with the coding region for the maize gene *jip1*. The promoter expresses from 15-40 days after pollination, and expresses primarily in the embryo and the pericarp. (Page 31, lines 1-3).

The fragments of the promoter are described, for example, at page 9, beginning on line 31 and in the attached 1.132 Declaration by Shane E. Abbitt. These subsets of the promoter are those of SEQ ID NO: 1 that promote expression in the seed embryo and pericarp (aka aleurone) of an operably linked isolated nucleotide sequence from about 15-40 days after pollination. Thus, one knows the structure and function of the fragments recited of SEQ ID NO: 1 in section (b) of Claim 1. The claims have been amended to recite that the functional fragment is

one that: "regulates transcription in maize seed embryo from 15 to 40 days after pollination."

Enablement

Claims 1, 21 and 44-45 remain rejected under 35 USC §112, first paragraph as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Office Action states: "The Office contends that Applicants have not disclosed information correlating the isolated nucleic acid molecule of SEQ ID NO: 1 with any expression data, other than the Northern analysis of the endogenous gene. Given the lack of expression data, it would not be clear to one of skill in the art, if the isolated promoter of SEQ ID NO: 1 actually directs expression as is observed for the endogenous gene."

Claims 1, 21, 44 and 45 have been amended. Support for the amendments is found in the specification on page 31, lines 1-3.

The applicant respectfully traverses the rejection. The Examiner is directed to the attached 1.132 Declaration which provides support for the present claims. The Declaration demonstrates that SEQ ID NO: 1 and fragments thereof, drive expression in a seed-preferred manner of an operably linked nucleotide sequence (in this case GUSINT) as predicted by the Northern data.

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CONCLUSION

For the foregoing reasons, reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,



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